

## Math Mites at the South Fayette Twp. Library

### What Is It?

South Fayette Twp. Library's Math Mites program for preschool aged children develops an understanding of basic math concepts required for school readiness. Through a series of interactive programs the program introduces children to twelve math concepts: counting beyond 10, subtracting one, size, tallying, shapes, number order, patterns, more or less, pairs & matching, sequencing, sets, and time.

Math Mites uses Stuart Murphy's *Mathstart*, picture books and multimedia materials to create an engaging program for children to learn valuable mathematical concepts through repetitive songs, flannel board activities, readings, and hands-on and group activities.

### How Did We Fund It?

In our initial year, when the program was held in the library only, we utilized math kits, books, CD's, and electronic materials (Tumblebooks) from within the Allegheny County Library Association. The approximate cost of the in-house program was under **\$500**.

The cost of the initial full-scale outreach and in-library program was approximately **\$5,000**. Yearly costs to maintain the program are approximately **\$600** per year, exclusive of staffing.

- The Library Board committed to supporting additional staffing hours to support expanded outreach.
- Funding from the PNC Charitable Trust made it possible for the library to purchase and present Math Mites on an ongoing basis.
- All of the materials used in the classes were presented to the daycare/preschool providers as kits to use in additional classroom instruction, and to have available to parents.
- Books are also available at the South Fayette Township Library and other libraries in the Allegheny County Library System for public use.

### Does It Work?

Initially, the Math Mites Outreach program enabled the library to reach 88 preschool aged children, at three separate child care facilities over the course of 9 months. The program served an additional 25 children within the library.

Parents and caregivers completed pre-surveys to assess their child's basic preschool math concepts (including counting, reverse counting, time sequencing, pairs, patterns, and number order).

Of the 88 post-program surveys collected, parents and caregivers reported:

- 77% showed a 100% retention rate with simple questions related to the concepts covered during the Math Mites sessions.
- 18% showed at 70-80% concept retention.
- 5% had difficulty recalling concepts.

The Math Mites Outreach program has been very successful and, with full support from the library's operational budget, has continued into 2015 with new materials and updated programs.

Math Mites allows us to collaborate with informal and formal educational partners in our community to promote lifelong literacy to families and children.